DOCUMENT RESUME

ED 388 929 CG 026 692

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TITLE Personality and Substance Abuse Disorders: A Review of the Recent Literature on Their Comorbidity and Implications for Diagnosis and Treatment.
PUB DATE May 95
NOTE 50p.; Doctoral Research Paper, Biola University.
PUB TYPE Information Analyses (070) -- Dissertations/Theses - Doctoral Dissertations (041)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Interviews; *Longitudinal Studies; *Mental Disorders; Outcomes of Treatment; Pathology; Patients; Personality; Self Evaluation (Individuals); *Substance Abuse
IDENTIFIERS Millon Clinical Multiaxial Inventory; Minnesota Multiphasic Personality Inventory

ABSTRACT

The major questions when considering substance abuse/dependence and personality are how these two constructs are related and how they interact. A review of the prevalence literature since 1986 documenting the co-occurrence of substance abuse disorders and personality disorders is presented in this study. Sampled are substance abuse and personality disorder treatment populations in the United States and Europe. The instruments used to assess the correlation between substance abuse/dependence and personality disorders include: (1) self reports; (2) clinical interviews; (3) the Minnesota Multiphasic Personality Inventory; and (4) the Millon Clinical Multiaxial Inventory. Consistent with earlier findings, there exists a high correlation between substance abuse/dependence and personality disorders in both treatment and nontreatment samples. Diagnostic treatment implications for dual diagnosis patients are briefly considered. Comprehensive diagnosis and treatment need to consider both Axis I and Axis II disorders. The 12-step model of Alcoholics Anonymous is recommended because it addresses both types of disorders. Contains 45 references. (SR)

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PERSONALITY AND SUBSTANCE ABUSE DISORDERS: A REVIEW OF THE RECENT LITERATURE ON THEIR COMORBIDITY AND IMPLICATIONS FOR DIAGNOSIS AND TREATMENT

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PERSONALITY AND SUBSTANCE ABUSE DISORDERS: A REVIEW OF THE RECENT LITERATURE ON THEIR COMORBIDITY AND IMPLICATIONS FOR DIAGNOSIS AND TREATMENT

A Doctoral Research Paper

Presented to

the Faculty of the Rosemead School of Psychology

Biola University

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Psychology

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by

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May, 1995

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ABSTRACT

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PERSONALITY AND SUBSTANCE ABUSE DISORDERS: A REVIEW OF THE RECENT LITERATURE ON THEIR COMORBIDITY AND IMPLICATIONS FOR DIAGNOSIS AND TREATMENT

Introduction

Traditional understandings of the relationship between addiction and personality pathology considered them to be one and the same. Addiction was classified as a personality disorder in early diagnostic manuals. It fell under the "Sociopathic Personality Disturbances" in the American Psychiatric Association's (APA) first manual, Diagnostic and Statistical Manual of Mental Disorders (DSM) (1952). Drug diagnoses were given a separate category in the second edition of the DSM (APA, 1968), although they were still considered among the Personality Disorders class. Only quite recently have drug diagnoses been removed from this class (DSM, third edition [DSM III], 1980). The implicit understanding from these previous manuals was that addiction was a relatively permanent trait that represented deviancy (Kosten, Kosten, & Rounsaville, 1989).

Since the separation of substance abuse disorders and personality disorders on Axis I and II respectively, an abundance of literature has emerged citing the co-occurrence of these phenomena along with attempts to better understand the relationship between them. In the literature through 1985 increased levels of co-occurrence of substance abuse and personality disorders were documented in both clinical and non-clinical samples.

In a series of prevalence studies cited by Peace and Mellsop (1987) the percentage of personality disorders found in alcoholics presenting for treatment ranged from 20% to 84.8%. In a review of over 2,400 psychiatric patients, 36% were found to have personality disorders. Substance abuse patients had a higher likelihood than any other psychiatric patient to have a personality disorder: 46% of alcoholics and 61% of non-alcoholic drug abusers had a personality disorder (Koenigsberg, cited by Nace, 1989). Blume (1989) cited a study from Norway that found a higher prevalence of borderline personality disorder in 81 alcoholic women compared with 64 non-alcoholic controls.

Higher prevalence rates have been found in non-clinical samples as well. In a study by Drake and Vaillant (cited by Nace, 1989), 23% of the men who abused substances met the criteria for an Axis II personality disorder. Considering just the alcoholics in this sample, 37% appeared to have a personality disorder.

The major questions when considering substance abuse/dependence and personality are how these two constructs are related and how do they interact. The relationship between addiction and personality remains unclear. According to the traditional understanding, personality difficulties precede and predispose one to addiction. Other theorists believe that personality pathology is the result of addiction. The third possibility is that these two constructs are by and large independent of each other. Questions concerning the existence of an "addictive personality," and the etiology of addictive disorders, a focus of significant research efforts, are subsumed under the larger question of the nature of the relationship between addiction

and personality. Attempts to answer these questions are beyond the scope of this paper, but they do form a backdrop to the current literature.

The purpose of this paper is to examine this relationship by considering the prevalence literature since 1986. Discussion of the prevalence literature naturally leads to some consideration of treatment. Consequently, in addition to a presentation of the recent prevalence literature, an abbreviated consideration of treatment approaches and the implications of working with dual diagnosis patients will also be presented. Considered will be the treatment literature that emerged in the context of the prevalence literature. It is not an exhaustive review of the treatment literature. At the outset, the major methodological issues in doing research on addiction and personality will be considered.

Methodological Issues

The methodology employed either by necessity or by choice in conducting research examining the relationship between addiction and personality does have its problem areas. No methodology is perfect, and this research is no exception to that. The predominant vulnerabilities are in its construct validity, instruments, samples, and procedures.

Definitions

Personality is an extremely complex, multifaceted entity. When considering research on personality one must ask the questions, what constructs are being measured, and how are these defined and/or operationalized? Here the literature can be confusing. Blume (1989) pointed out that sometimes researchers of personality are looking at traits,

sometimes types, and sometimes disorders. When these distinctions are not clearly delineated, conceptual confusion results.

Increasingly, researchers have used conceptualizations of personality based on the DSM III-R (APA, 1987). The DSM III-R indicated that a personality is disordered when personality traits are inflexible and maladaptive and constitute either significant functional impairment or subjective distress. The diagnostic criteria for personality disorders, which are by and large behavioral, are then listed. The great advantage in using the DSM to diagnose personality disorders is that it allows for uniformity in diagnosis and comparability across studies.

Some problems do arise, though, when considering what constructs might underlie specific disorders of personality: There is some similarity across the diagnostic criteria. In other words, there are no reliable behavioral indicators of specific personality constructs. This absence is especially problematic in the cases of borderline personality disorder and antisocial personality disorder, which both list inappropriate use of alcohol in diagnostic criteria. These are two personality disorders frequently associated with substance abuse in the literature. So it is difficult to distinguish whether one is measuring a maladaptive personality trait, an incidence of substance abuse, or both. The lack of conceptual clarity in the literature about what personality component is being measured does make sorting out the relationship between addiction and personality more problematic.

When considering substance abuse, similar problems are found. Addiction, substance abuse, and substance dependence along with alcoholism are the terms most frequently used in the literature. If these terms are not defined or operationalized coherently (or, worse, they are used

interchangeably) it becomes very difficult to know what exactly is under consideration. Substance abuse, like personality, is not a unitary entity as traditional understandings might suggest. Rather it is multifaceted, and care must be taken in defining and operationalizing it. However, there appears to be more agreement on what constitutes substance abuse and dependence than on what constitutes personality or personality disorder.

The use of the DSM in defining substance abuse and substance dependence offers, as for personality disorders, some uniformity in diagnosis and basis for comparison across groups and studies. The implication for the lack of conceptual clarity in substance abuse constructs in terms of understanding the major questions is the same as that for personality constructs. It does make attempts to sort out the relationship between addiction and personality more difficult.

Instruments

A variety of measures have been used to assess both addiction and personality components, such as objective personality inventories, clinical inventories, and both formalized structured interviews and less structured interviews. The fact that these are primarily self-report measures is both a strength and weakness of this research. Self-report measures are valuable because they allow direct contact with the material in question. However, they have some characteristic vulnerabilities, especially with a substance abusing population. Self-report data can be distorted in several ways. Addicts have a tendency to under report substance abuse (denial being symptomatic in this population) and over report psychiatric symptomology. Memories are often distorted either selectively for defensive purposes or through cognitive impairment.

Objective personality measures, like the Minnesota Multiphasic Personality Inventory (MMPI) and the Millon Clinical Multiaxial Inventory (MCMI), have the advantage of being standardized. Their ability to distinguish personality functioning is well known. In addition to this they both include indicators of substance abuse.

Clinical interviews also are used extensively (e.g., Helzer & Pryzbeck, 1988; Nace, Davis, & Gaspari, 1991; Zimmerman & Coryell, 1989) in the prevalence data on addiction and personality. Less structured interviews offer rich data but no standardized comparison base and are vulnerable to ideosyncratic emphases. Structured interviews, like those based on the DMS III-R offer some standardization allowing for meaningful comparisons while not drastically prohibiting the acquisition of clinical data.

A few constructed and less well known instruments are included in the research (e.g., Personality Research Form, Jackson, 1968). Some of them offer the advantage of asking more direct questions of the data but typically psychometric information is lacking.

Samples

One of the most often cited criticisms of this type of research is that its generalizability is limited due to its heavy reliance on samples drawn from treatment populations. There is no question that this is in large part the population of interest and such subjects are readily available. The central methodological question regarding those seeking treatment is whether they differ in some way from those who are not seeking treatment. Would a different picture emerge, for instance, if addicts not in treatment were included. Control groups when utilized mitigate this limitation.

Procedures

In assessing prevalence in dual diagnosis patients, sometimes referred to as point prevalence, both substance abuse and personality functioning are measured in some way. Retrospective analysis is used frequently to determine patterns of both substance abuse and personality development. Diagnosing both disorders requires the researcher to inquire about past and recent psychiatric and substance abuse history.

In most research the subjects were seeking substance abuse treatment and were assessed both for substance abuse and personality functioning in early treatment. Blankenfield (cited in Blume, 1989) stated that during and immediately after the detoxification period are when symptoms both in regards to substance abuse and those that make up personality disorder diagnoses are most acute. As sobriety is established, both personality trait expression and disorders change (Blume, 1989). Consequently, assessments conducted at intake, or in early treatment of both substance abuse symptomology and personality psychopathology may not yield stable data. Therefore, point prevalence indicators may be inflated. Assessments of state factors at intake may be unreliable indicators of underlying traits. Consequently, point prevalence data may be limited in addressing the larger question of the relationship between addiction and personality.

In terms of statistical procedures, correlations are used frequently in establishing prevalence data. In the current research correlations are helpful in establishing that a relationship exists between substance abuse and personality disorders. However, correlations are limited in the information they can provide regarding the etiology and course of comorbidity. Readers interested in more detailed considerations of the methodology of research

with dual diagnosis patients are referred to Sutker and Allain (1988), Blume (1989), Miller and Fine (1993), Donovan (1986), and Peace and Mellsop (1987).

Current Prevalence Research

What follows is an examination of the literature documenting the comorbidity of personality and substance abuse disorders in a variety of populations since 1986. Included are both treatment and non-treatment samples in the United States and Europe.

Treatment Populations - United States

Using a non-random sample of 100 consecutive admissions to a private psychiatric hospital for substance abuse treatment, Nace, Davis, and Gaspari (1991), diagnosed substance dependence according to DSM III-R criteria, two weeks after admission. They then administered the Structured Clinical Interview for DSM III-R Personality Disorders (SCID II). To determine interrater agreement using the SCID II, the three authors blindly assessed the presence of personality disorder in 10 patients. They obtained a Cohen's Kappa of .90 ($t = 5.6$, $df = 43$, $p = < .001$). Patients also completed the Alcohol Use Inventory which measures the perceived benefits, styles, and consequences of alcohol use; the Minnesota Multiphasic Personality Inventory (MMPI); the Health and Daily Living Form which measures health and social functioning; the Shipley Institute of Living Scale which estimates intellectual functioning; and the Chemical Use Inventory which measures lifetime use frequency of 38 chemicals. To determine differences between the personality disorder group and the group without personality disorders, t tests were used with the Bonferroni correction.

The authors found that 57% of the 100 consecutive admissions had at least one personality disorder according to the SCID II, and 43% did not. They also found that subjects with personality disorders were more extensively involved in substance abuse than those without personality disorders. The former subjects also scored significantly higher than the latter on measures of compulsive alcohol use, use of alcohol to manage mood, use of alcohol to enhance functioning, and the pervasiveness of alcohol in one's life on the Alcohol Use Inventory. On the MMPI, standardized scores were significantly higher for all clinical scales except for 1, 3, and 5. On the Health and Daily Living Form the personality disorder group scored significantly higher on global depression, negative life changes, avoidance as a means of coping, and emotional discharge as a means of coping. The group without personality disorders scored significantly higher on problem solving.

Also using consecutive admissions for alcoholism treatment, Mendelson, Babor, Mello, and Pratt (1986) considered inpatients to 13 hospitals across 8 states (N = 10,758). They found that 17.34% of the men and 17.06% of the women qualified for a personality disorder diagnosis according to the the International Classification of Diseases (ICDA-8) (Department of Health, Education and Welfare, 1967-1969).

These are high percentages of large samples, but not much information is provided about how patients were assessed. The authors indicated that medical and laboratory examinations were conducted after admission and throughout hospitalization. Standardized personal interviews were conducted by admitting personnel at admission and discharge. Standardized ratings and related information also were gathered throughout treatment. None of the instruments were specified, nor was any

information on length of hospitalization provided. The examining physician synthesized the preceding information and formulated a diagnosis at discharge. Though the numbers within the diagnostic categories containing personality disorders were large, the lack of assessment information made it more difficult to determine their significance.

In another retrospective study (Fabrega, Ulrich, Pilkonis, & Mezzich, 1993), clinical and demographic data were examined for 18,179 adults who visited a walk-in clinic of a public psychiatric facility. The instrument utilized was the Initial Evaluation Form, a semi-structured assessment procedure with complementary narrative and standardized components. The form included all DSM III-R Axis I and II diagnoses. The assessments were conducted by nurse clinicians and social workers who had received special training, and the results were confirmed by faculty staff. The nature of the special training was not indicated, nor was the designation of the faculty staff.

The nominal variables, including type of Axis I diagnosis, were submitted to chi square analysis. The clinical variables were measures on continuous scales and were evaluated by t tests and F tests. Data for some patients were not complete. Thus the number of subjects in some analyses was less than the total.

Fabrega et al. found that 12.9% (n = 2,344) were given a primary diagnosis of personality disorder. They also found that the Axis I primary diagnoses most frequently associated with a diagnosis of a personality disorder were substance use disorders: 32% of persons with a substance use disorder also had a personality disorder.

Ostensibly, the diagnoses both of personality disorders and substance abuse disorders were made according to DSM III-R criteria, which would make them relatively reliable. On the other hand, the fact that diagnoses were made at intake does raise some concern since this is when Axis I and II symptomology is most flagrant. In addition, Fabrega et al. (1993) stated that the assessments were done rapidly. They caution that the low percentage of diagnosed personality disorders may be due to this procedure. Rapid assessments raise questions about the accuracy of the diagnoses on both Axis I and II. The authors suggested that a higher rate of diagnosed personality disorders might have been found had more time been taken for diagnosis.

In a well designed study attempting to determine the prevalence of lifetime and current psychiatric disorders in a treatment population, Ross, Glasser, and Germanson (1988) recruited 501 subjects (men, $\underline{n}$ = 260, women, $\underline{n}$ = 241) registering for treatment at an addiction research and treatment facility. To obtain equal sized samples of men and women for another aspect of the study not reported, women were oversampled.

A complete psychiatric history was obtained from each subject using the National Institute of Mental Health Diagnostic Interview Schedule (DIS), version M. Lifetime and current diagnoses were made according to DSM III (APA, 1980) criteria. Subjects also filled out a number of self report scales. These included the short form of the Beck Depression Inventory, the Carroll Rating Scale for Depression, the Michigan Alcoholism Screening Test (MAST), the Drug Abuse Screening Test (DAST), and the Alcohol Dependence Scale (ADS). Subjects were assessed relatively soon after they registered for treatment. The mean number of days between the date of

registration and the interview was 4.5. The median was two days and three fifths of the sample was interviewed within three days of registration.

The k statistic and Yule's coefficient of collegation was used to assess interrater reliability. For DIS lifetime diagnoses, interviewer-observer k ranged from .88 - 1.00 with a mean across diagnoses of .99. For current disorders, the k and y coefficients were .74 and .78 respectively. For categorical data comparisons the chi square statistic was used. For comparisons of group means t tests and one way ANOVAs with Scheffe's tests were reported. Multiple substance abuse and demographic factors associated with prevalence were analyzed with a conventional multiple logistic regression analysis.

Of the 260 men and 241 women, 87% received a lifetime diagnosis of alcohol abuse/dependence, and 72% received a current diagnosis of alcohol abuse/dependence. In addition, 49% (lifetime) and 36% (current) received a diagnosis of drug abuse/dependence.

A large number of subjects received a diagnosis of antisocial personality disorder: 46% lifetime, 36% current. Ross et al. (1988) reported the incidence of antisocial personality disorder with and without DSM III-R exclusion criteria. Yet even when the diagnosis was made with the exclusion criteria, 41% still received the diagnosis for lifetime and 32% received it currently. The difference in prevalence rates for antisocial personality disorder between those with and without alcohol and/or drug diagnosis was striking. Of those who did not receive an alcohol or drug abuse diagnosis, 20% received a diagnosis of antisocial personality. This percentage jumped to 41.9% when those with alcohol disorders were considered. And when those with a diagnosis of both alcohol and drug abuse were considered, 79%

of them received a diagnosis of antisocial personality disorder. These differences were found to be significant ($p < .001$). In addition, when considering age at onset, the authors found that for 98.8% and 99.4% of those with alcohol and drug abuse disorders respectively, their antisocial personality disorder preceded their substance abuse disorder.

The prevalence rates reported are relatively high, suggesting that in treatment populations there is a high incidence of antisocial personality disorder, though the brief interval between intake and assessment may have inflated these numbers somewhat. The age at onset findings also show that in the case of antisocial personality disorders, a diagnosis of substance abuse and/or dependence follows the diagnosis of antisocial personality disorder. This is consistent with the early classification of alcohol drug addiction as a type of sociopathic disturbance.

Kosten, Kosten, and Rounsaville (1989) utilized a sample of 150 opiate addicts located 2.5 years after the start of treatment to consider prevalence rates for personality disorders and whether specific personality disorders showed prognostic specificity. Psychiatric diagnoses were made using the Research Diagnostic Criteria (RDC) based on information collected in the Schedule for Affective Disorders and Schizophrenia (SADS) (Endicott & Spitzer, 1978; Spitzer, Endicott, & Robbins, 1978). An interview section was added to the SADS covering all items in the DSM III criteria for personality disorders because the SADS is primarily limited to antisocial personality disorder. The Addiction Severity Index (McLellan et al., 1980) was also used. It is a structured interview yielding 10 point (0-9) clinical ratings of problem severity in six areas: employment, social, legal, medical, psychiatric, and substance abuse problems.

Eleven different types of DSM III personality disorders were diagnosed in the sample, but the rate of several of them were relatively low. One quarter of the sample met criteria for more than one personality disorder. For purposes of data analysis, personality disorders were collapsed into four categories: (a) antisocial personality with no other personality diagnosis; (b) borderline personality, including borderline, schizotypal, schizoid, and paranoid; (c) self, including histrionic, dependent, narcissistic, and (d) other, including mixed, avoidant, and passive aggressive. The rationale for these categories was not provided. The reader was referred to a previous study by the authors (Kosten et al., 1982).

The specific rates for the four personality categories were antisocial (44%), borderline (17%), self (10%), and other (8%). Again, antisocial personality disorder is highly represented in this treatment population with borderline personality disorder showing the next highest prevalence.

A study by Nace, Saxon, and Shore (1983), although conducted in 1983, is considered in this paper because it is often cited in the more recent literature. The study used 94 inpatients consecutively admitted to an alcoholism program in a private psychiatric hospital. They were assessed for alcohol dependency according to the National Council on Alcoholism Criteria (National Council on Alcoholism Criteria Committee, 1972). They were then given the Diagnostic Interview for Borderlines (DIB) (Kolb & Gunderson, 1980) two weeks after their last drink. This interview is designed to discriminate borderline from non-borderline conditions assessing five content areas: social adaptation, impulse action patterns, affects, psychotic symptoms, and interpersonal relations.

Using an operational definition of borderline personality disorder as a score of 7 or greater on the DIB, 21.2% of the 94 alcoholics had such a diagnosis. Since the sample was selected for alcohol use, the authors subtracted the contribution to that score made by alcohol use items. By this more conservative criteria they found 12.8% to have borderline disorders.

No reliability or validity data is provided for the DIB, and this absence makes the borderline diagnosis more difficult to evaluate. The removal of alcohol use items from the DIB and the two week time period between admittance and assessment do add more weight to the findings.

To summarize, in substance abusing treatment populations in the United States there is a high prevalence of personality disorders reported. When personality disorders are considered, the most frequently occurring Axis I disorders to be found are substance abuse and dependence. These studies clearly indicate the presence of personality pathology in the majority of those with substance abuse disorders. The fact that these studies all utilized treatment populations does limit their generalizability. In addition, the short period of time, usually a few days, between admittance and assessment may tend to increase prevalence rates since symptoms, both Axis I and Axis II are likely to be most flagrant during the detoxification period. Nevertheless in U. S. treatment populations personality and substance abuse disorders are shown to occur together consistently.

Treatment Populations - Europe

A Netherlands study conducted by DeJong, van den Brink, Harteveld, and van der Wielen (1993) to consider the prevalence of DSM III-R personality disorders, used a consecutive series of 178 alcoholics and 86 polydrug addicts admitted for treatment at an addiction treatment institute.

Patients were assessed with the Structured Interview for DSM III Personality Disorders (SIDP) (Pfohl, Stangl, & Zimmerman, 1983) after a three week detoxification period. The SIDP is a semi-structured interview designed according to the conceptual and nosological distinctions of the DSM III. The authors report that the SIDP has been found to be reliable and to demonstrate "promising" construct and predictive validity in both the United States and the Netherlands. Straight percentages were used to report prevalence.

The study reported that 78% of alcoholic inpatients met the diagnostic criteria for at least one personality disorder, and 72% met criteria for more than one personality disorder. The most frequent were histrionic (34%), dependent (29%), avoidant (19%), compulsive (19%), and borderline (17%). In the polydrug group, 91% met criteria for at least one personality disorder, and 80% met criteria for more than one personality disorder. The most frequently occurring personality disorders for this group were borderline (65%), histrionic (64%), passive aggressive (49%), antisocial (48%), schizotypal (41%), and dependent (35%). What is somewhat surprising about this breakdown is the low number of antisocial and borderline personality disorders in the alcoholic group and the high number of histrionic and dependent personality disorders in both the alcoholic and polydrug groups.

The prevalence of Axis II diagnoses is very high for both of these groups. The use of a structured interview and DSM III criteria along with a three week detoxification period before assessment significantly strengthen these findings.

In a study completed in Italy, Poldrugo and Forti (1988) considered a sample of 717 consecutive male admissions to a psychiatric clinic. Diagnoses were made according to DSM III criteria through patient interviews and

information obtained from relatives and significant others. How this information was gained was not specified. The authors indicated that attempts were made to establish interrator reliability, and to discriminate in diagnosis behavioral disturbances that were attributable to alcohol consumption and those that were not. Again, how these procedures were done was not specified. Alcoholics with and without personality disorders (controls) were compared and the chi square statistic was used to differentiate and examine differences. Among alcoholics, 25% fulfilled the DSM III criteria for personality disorders. Personality disorders most represented were antisocial (8.9%), dependent (4.2%), borderline (3.5%), avoidant (2.0%), and passive aggressive (1.7%). By comparing alcoholics with and without personality disorders the authors found that antisocial personality disorder is the only Axis II disorder positively associated with alcoholism. In addition, they found that histrionic, compulsive, and schizoid personality disorders were negatively associated with alcoholism. This finding is contrasted with the high prevalence rate of histrionic personality disorder cited in the previous study.

Overall, the rates of comorbidity were lower in this study than in treatment populations in the U.S. generally and in the study from the Netherlands just cited. The authors speculated that the difference may be a consequence of different drinking patterns. Alcoholism tends to be reported more as a problem in Northern Europe and Scandinavia than in Southern Europe. Cultural differences may also, in part, explain the discrepancy in the prevalence rates for histrionic personality disorder, among others. Personality disorders in general, and cluster B personality disorders in particular, may be considered less deviant in the more expressive culture of

Southern Europe. They also conceded that this may be a conservative estimate due to the fact that many subjects were coded with "deferred diagnosis." No more explanation was given which makes it difficult to evaluate the significance of these prevalence rates.

In another study done in Italy, Bellodi et al. (1990), using a control group, considered the possible relationships between subjects with personality disorders and those with and without DSM III Axis I psychopathology. The sample consisted of 250 patients (men, n = 113, women, n = 137) taken from a hospital based outpatient service who had an Axis I diagnosis in their life course. The control group consisted of 134 subjects (74 women, 60 men). Fifty-one were surgical, medical, or obstetric inpatients, 33 were utilized from an ongoing general population study in which subjects were randomly selected from the town population (Milan), and 50 were the spouses of inpatients with affective disorders. All controls had no history of Axis I disorder currently or in their lifetime.

Both groups underwent a structured Schedule for Affective Disorders and Schizophrenia - Life-time Version (SADS-LA) interview for Axis I life course pathology and a semi-structured SIDP interview for Axis II diagnosis. Possibly confounding internal validity, the majority of Axis II assessments were made when the interviewer was aware of the Axis I diagnosis. In stating the reason for this questionable procedure the authors indicated a desire to better discriminate between "trait versus state" condition on Axis I. A chi square test was used to analyze the relationships between Axis I and Axis II diagnoses. A correlational analysis was used to analyze the frequency, comorbidity, and reciprocal relationships of Axis II disorders in patients and controls taken as a whole group.

The results showed that among the 134 control subjects without Axis I disorders, 44 (33.8%) met at least one specific personality disorder diagnosis. Among the 250 patients with an Axis I disorder, 127 (51%) met at least one personality disorder diagnosis. Subjects without Axis I disorders had significantly fewer personality disorder diagnoses compared to patients with Axis I disorders ($c^2 = 18.7$ $p < .00001$, $df = 1$). In addition, they also found that borderline personality disorder was significantly associated to substance abuse disorders ($c^2 = 7.3$, $p < .001$, $df = 1$). Surprisingly they found that antisocial personality disorder was uncommon, being present only in 2.1% of the subjects and only in those with a coexistent Axis I disorder. It should be kept in mind that the authors looked at a range of Axis I disorders, not merely substance abuse disorders. This broader focus may explain the limited number of antisocial personality diagnosed subjects. It also makes it difficult to compare these prevalence numbers with those emerging from studies using substance abusing patients exclusively. Nonetheless, the authors presented some interesting findings on the relationship between Axis I and Axis II disorders.

The prevalence findings from the European samples appear to be a bit mixed. The study from the Netherlands showed very high prevalence rates while the first Italian study showed rates much lower. The study from the Netherlands appears to be methodologically stronger, hence, its numbers may be more trustworthy. The second study from Italy shows a more general relationship of a higher percentage of Axis II disorders in those with an Axis I diagnosis as opposed to those without an Axis I diagnosis. In terms of the relationship between substance abuse and particular personality disorders, the findings appear to be heterogeneous. In this brief sampling of European

treatment populations personality and substance abuse disorders are shown to consistently co-occur though not quite as strongly as in U.S. treatment populations.

Comorbidity in Non-Treatment Populations

In a study considering data from the Epidemiologic Catchment Area (ECA) study, in which face to face interviews with over 20,000 respondents across five states were used, Helzer and Pryzbeck (1988) reported prevalence rates for comorbidity in the general population. The authors reported that even though the interview data set was weighted to make it representative of the demographic distribution of the total United States population, it would be "hazardous" to think of these data as representative of the entire country.

Diagnoses were made according to the Diagnostic Interview Schedule. Alcoholism emerged with the highest lifetime prevalence rate (13.7%) of all the major DSM III disorders with drug abuse/dependence third at 5.9%. The correlation (Spearman) between substance use disorders and non-substance use diagnoses, both Axis I and II, was a striking .98. In terms of specific comorbidity, antisocial personality showed the highest prevalence rates with alcoholism at 21%. The antisocial personality correlation with alcoholism was higher than any other major DSM III disorder. This strong association is consistent for both sexes, every age group, and all five ECA sites. Thus, even in this non-treatment population, the strong association between alcoholism and antisocial personality remains.

In another study using a non-patient sample, Zimmerman and Coryell (1989) directly interviewed 808 relatives of normal controls (n = 185), and patients with schizophrenia (n = 131), psychotic and non-psychotic

depression (n = 247 and n = 235, respectively), or another psychiatric disorder using the DIS and the SIDP. The chi square statistic and Fisher's exact test was used to analyze categorical variables, and F tests were used to analyze continuous variables.

Of those receiving an Axis II diagnosis 44.1% also received a diagnosis of alcohol abuse/dependence compared to 12.5% in those who received no Axis II diagnosis. This difference was significant ($p < .001$). In addition, 22.4% of the personality disordered group received a diagnosis of drug abuse/dependence compared with 4.7% in the no personality disordered group. This difference was also significant ($p < .001$). In terms of specific personality disorders, a significantly greater number of those with paranoid, schizotypal, compulsive, histrionic, dependent, antisocial, avoidant, borderline, and passive aggressive diagnoses also received a diagnosis of alcohol abuse/dependence in comparison with the no personality disorder group ($p < .001$). Those with paranoid, schizotypal, histrionic, antisocial, avoidant, borderline, and passive aggressive also received a significantly ($p < .001$) greater number of drug abuse/dependence diagnoses in comparison with the no personality disorder group. Those with an antisocial personality diagnosis received significantly ($p < .001$) more alcohol abuse/dependence and drug abuse dependence diagnoses than any other personality disorder, with the exception of borderline personality disorder, which also showed a significant difference ($p < .001$) with the other personality disorders on measures of alcohol abuse/dependence diagnoses.

In this non-patient sample, Zimmerman and Coryell (1989) found high prevalence rates though they caution that since these were first degree relatives of psychiatric patients, they were at increased risk for Axis I and II

disorders. In addition, the DIS and the SIDP were completed by the same interviewer with the DIS always given first. Consequently, the interviewer was not blind to the Axis I diagnosis when assessing for Axis II. This procedure may have biased the findings and increased prevalence rates. However, it is doubtful that these methodological problems account for all of the differences between the personality disorder and no personality disorder groups.

In both of these non-patient samples, high prevalence rates were found for co-occurrence of substance abuse/dependence and personality disorders. These results add weight to the findings of those studies using treatment samples by pointing to a high positive correlation between substance abuse/dependence and personality disorders.

Comorbidity and Objective Personality Measures

Several objective personality measures have been used to demonstrate a relationship between personality and substance abuse disorders. The MMPI and the MCMI appear to be the most widely used and both have a significant base of research to support their psychometric properties.

In a study by Brown (1992) using the Millon Clinical Mutiaxial Inventory (MCMI) (Millon, 1977) 34 male and 16 female alcoholics and/or drug addicts were assessed after completing at least 21 days of inpatient treatment. Statistical analysis yielded MCMI Axis II scale means, standard deviations, and percentages of subjects presenting clinically elevated scale scores. All profiles were reported as valid.

Base rate scores of between 60-74 suggest the presence of pathology according to Millon's criteria. The sample as a group presented mean scores indicative of dependent-submissive ($\underline{M}$ = 60.68), narcissistic ($\underline{M}$ = 65.12),

antisocial-aggressive (M = 60.74), and paranoid (M = 60.32) traits. Eighty-six percent of the subjects scored 75 or above on at least one personality scale with 78% scoring at clinically significant levels (75+) on two or more scales, 48% on three or more scales, and 24% on four or more scales. Using a more stringent cutoff score of 85, 70% of the sample exhibited scores indicative of personality pathology traits in at least one of the 11 diagnostic categories. Thirty-eight percent exceeded the more stringent cutoff on two or more scales and 24% on three or more scales. In addition, the author found that nine of the subjects' profiles fit Millon's "borderline personality" covariation, one profile fit his "schizotypal" category, four subjects' profiles fit the "narcissistic" covariation pattern and nine subjects demonstrated "antisocial" covariation patterns.

So, according to Millon's conceptualizations and in comparison with his standardization group, alcoholics and drug addicts demonstrate significantly more psychopathology than those without substance abuse disorders. Further, borderline and antisocial configurations are most strongly represented. This study appears to strengthen the evidence that personality pathology occurs consistently with substance abuse/dependence, although the small sample size may limit its generalizability somewhat.

In another study using Millon's (1987) inventory, McCann, Flynn, and Gersh (1992) considered 26 patients diagnosed with borderline personality disorder and 42 who received no personality diagnosis. Patients were admitted to one of six acute care psychiatric units of a large general hospital. They were interviewed upon admission and diagnosed according to DSM III classification. Chi square analyses were used for discrete data and for continuous data, F tests were used. The MCMI II was completed within five

days of admission. MCMI II protocols were computer scored, and then the base rates for each scale were subjected to Analysis of Variance.

On scales B and T, alcohol and drug dependence respectively, the borderline group scored higher than the non-personality disordered group at a level that was significant, adjusted $p = .003$. This finding appears to be consistent with the diagnostic criteria of borderline personality disorder, though one might expect the differences between these groups to be larger in light of the seemingly disproportionately large number of borderline personality disordered individuals in treatment populations.

In a major review of MMPI characteristics of alcoholics, Graham and Strenger (1988) confirm the findings of earlier reviews that there is no single alcoholic profile type. Rather there are important individual differences among alcoholics although they collectively share some common characteristics. As a group, alcoholics have low frustration tolerance and poorly controlled anger. They tend to be impulsive and to resent authority. These characteristics are suggested by their relatively high MAC scores, (MacAndrew, 1965), their consistently elevated scores on scale 4, and by the frequent occurrence of scale 4 in their two point and cluster profile types.

From these studies it appears that on the MCMI substance abusers score higher than non-abusers on levels of personality pathology. In addition, those with a diagnosed personality disorder (borderline) scored higher on measures of substance abuse than those without a borderline diagnosis. The review of the MMPI literature indicates that substance abusers do not manifest a single "alcoholic profile," although they do share some common pathological personality characteristics as demonstrated by consistently elevated 4 scales and MacAndrew scales. These objective

personality measures appear to demonstate the consistent co-occurence of personality and substance abuse disorders.

Longitudinal Studies

Few longitudinal studies are found in the literature. Because of the time and expense involved they are typically more difficult to do. In the prevalence literature they offer the important potential of providing developmental information on the relationship between personality and substance abuse disorders.

In an interesting sequential longitudinal study designed to examine the relationship between personality and alcohol and drug use in adolescence, Labouvie and McGee (1986) randomly selected three groups of adolescents 12, 15, and 18 years old. Subjects were measured on frequency and quantity of alcohol, marijuana, cocaine, and cigarette use, and reactive coping use (i.e., to feel better when faced with a problem) using a self report format. Their personality attributes were measured with a shortened version of the Jackson Personality Research Form-E (PRF-E) (Jackson, 1968). Self esteem was measured by various positive and negative self evaluations. They were then evaluated with the same measures three years later at ages 15, 18, and 21.

Specific procedures were not reported in the study, although they were available upon request. This absence makes the study a bit more difficult to evaluate. For example, it is not known how the self report information was gathered, in what order, by whom, or if the interviewer was blind to subject's personality data. When considering the short form of the Jackson PRF-E, Labouvie and McGee (1986) reported that the 3 year stability coefficients were

in the "expected magnitude," ($\underline{r}$ = .42). These coefficients appear to be somewhat low, thus making the reliability of this measure a question.

Data were analyzed by summing the 18 personality measures and the 5 use variables across both occasions. They were then divided into heavy, moderate, and light users. The aggregated PRF scales and the self esteem variable were first analyzed by performing separate 3 x 3 x 3 (sex x age x user group) analyses of variance (ANOVA). Separate chi square analyses were performed for each age-sex group to examine the relation of use level to the number of safe and risky personality attributes.

Results indicate that at age 12 little drug and alcohol use was reported, and there was not much difference between the three user groups. Light users tended to limit their use to alcohol even at age 21 although intensity of use did increase a bit compared to ages 12 and 15. Moderate users exhibited fairly regular use patterns of alcohol and cigarettes by age 15, followed by marijuana at 18. Finally, heavy users exhibited regular use of alcohol, marijuana, and cigarettes by age 15, and occasional cocaine use by 21.

In terms of personality differences, significant main effects of user groups were obtained for the following eight scales: achievement, autonomy, affiliation, cognitive structure, exhibition, harm avoidance, impulsivity, and play. Mean trends indicated that affiliation, autonomy, exhibition, impulsivity, and play increased while achievement, cognitive structure, and harm avoidance decreased with increasing use involvement. However, only between 3% and 10% of the variance for each scale was accounted for by user group effect. Labouvie and McGee (1986) speculated that the large degree of error variance may be due to a large amount of overlap in score distributions. Although the authors caution against

drawing definite conclusions regarding underlying causal mechanisms, they propose that their study provides evidence supporting personality attributes as antecedents and alcohol and drug use as consequents, when considering the relationship between personality disorders and substance abuse.

This study has some significant strengths, and it provides some important information. It utilized a longitudinal design and a randomly drawn sample from an adolescent non-treatment population. It indicates a link between a measure of personality pathology and increasing levels of substance abuse. However the possibility that there may be overlap in score distributions increasing error variance and somewhat low reliability coefficients do weaken these findings and call into question the authors' conclusions.

In another longitudinal study, Drake, Adler, and Vaillant (1988) examined the antecedents of personality disorders in a community sample of middle aged men. The relationship between individual personality disorders and alcoholism was one of the specific questions that they considered. Originally the sample served as a control group for an investigation of juvenile delinquency. It consisted of 456 early adolescent boys. At age 47+/- 2 years, 87% of the survivors ($\underline{N}$ = 369), were given a semi-structured psychiatric interview by experienced clinicians which included questions regarding alcohol use and social and occupational functioning. Alcoholism was diagnosed according to DSM III criteria for lifetime prevalence. Raters were blind to the subjects' Axis II diagnosis and childhood data. Of the 369 subjects, 86 (23%) had received personality disorder diagnosis for a previous study. A reliability coefficient of 0.77 (Kappa score) was provided by the authors for distinguishing personality

disordered from non-personality- disordered subjects. For the present study Drake et al. (1988) independently reviewed interview transcripts of the 86 subjects to make independent Axis II diagnoses. Disagreements were discussed until consensus was achieved.

Subjects early life functioning was assessed using a variety of measures. Clinicians who were blind to all information collected after the subjects' adolescence used records from social services; interviews with the early adolescent boy, his parents, and his teacher rated each subject in the following areas: family social class, full scale Wechsler Adult Intelligence Scale IQ (WAIS-IQ), boyhood competence, environmental (family) weaknesses, emotional functioning, and physical health.

The results showed that of the 83 personality disordered subjects, 23 (28%) met the DSM III criteria for alcohol dependence during adulthood, compared to only 39 (10.5%) of the men without personality disorders ($p < .001$). Drake et al. (1988) also stated that alcoholism was overrepresented in the "dramatic, emotional, and erratic" DSM III cluster of personality disorders. This cluster includes the antisocial and borderline diagnoses.

This study shows that significantly higher levels of alcoholism were found in those subjects who also had a personality disorder. The fact that the subjects were from the community and not from a treatment population suggests that the higher levels of substance abuse associated with personality disorders and vice versa are not limited to treatment populations. This study appears to be sound thus making the results more trustworthy, though the sample composition (no women, no blacks, and all selected from inner city schools) may limit generalizability.

Summary of Prevalence Studies

The above prevalence studies demonstrate fairly clearly that there is a higher prevalence of diagnosed personality disorders within a substance abusing population. When non-treatment samples are included and the primary consideration is the personality disorder, the most commonly co-occurring Axis I disorder is substance abuse/dependence. When objective measures are considered, increased levels of psychopathology are found in substance abusing populations. In addition, increased levels of substance abuse are found in personality disordered subjects (borderline) when Axis II is the primary consideration.

Overall the studies demonstrate heterogeneity in terms of Axis II diagnoses. However, in terms of specific personality disorders, antisocial personality disorder and borderline personality disorder appear to be most often associated with substance abuse and dependence. One possible explanation for antisocial personality disorder and borderline personality disorder often being associated with substance abuse/dependence is that substance abuse or inappropriate use of substances is one of the diagnostic criteria in each of these Axis II disorders. Even in non-treatment populations there remains a positive correlation between substance abuse and antisocial personality.

Treatment Considerations

The fact that there exists a high positive correlation between personality pathology and substance abuse and dependence seems to be clearly indicated by the prevalence literature. These high levels of co-occurrence have important implications for treatment. The knowledge that

personality disorders and substance abuse and dependence occur together frequently makes possible more comprehensive treatment. It increases the likelihood that clinicians will assess for personality pathology in substance abusing populations, and substance abuse/dependence in those suffering from personality disorders, thus allowing intervention at both levels.

The prevalence data do not provide much information on the nature of the relationship between personality pathology and substance abuse and dependence. The question about whether personality pathology precedes and predisposes to substance abuse, emerges from substance abuse, or is independent of substance abuse remains unanswered.

A comprehensive review of the treatment literature concerning dual diagnosis patients is beyond the scope of this paper. What will be considered is a briefer introduction to the treatment literature focusing on the twelve steps of Alcoholics Anonymous. The twelve steps are an important component to almost all of the major treatment approaches no matter how the relationship between personality pathology and substance abuse and dependence is viewed. The twelve steps of Alcoholics Anonymous are listed in Table 1.

Personality Pathology Precedes Substance Abuse and Dependence

Many of those who are inclined to believe that personality pathology precedes substance abuse/dependence are psychoanalytically oriented clinicians and researchers. Psychoanalytic theory in general views addiction (roughly equivalent to substance dependence) as both emerging from andattempting to compensate for, "self medicate," deficits in psychic structure (Johnson, 1993; Rinsley, 1988; Southwick & Satel, 1990). More specifically, Johnson (1993) stated that addiction can be conceptualized

Table 1

Twelve Steps of Alcoholics Anonymous

1. We admitted we were powerless over alcohol - that our lives had become unmanageable.

2. Came to believe that a Power greater than ourselves could restore us to sanity.

3. Made a decision to turn our will and our lives over to the care of God as we understood him.

4. Made a searching and fearless moral inventory of ourselves.

5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.

6. We are entirely ready to have God remove all these defects of character.

7. Humbly asked Him to remove our shortcomings.

8. Made a list of all persons we had harmed, and became willing to make amends to them all.

9. Made direct amends to such people wherever possible, except when to do so would injure them or others.

10. Continued to take personal inventory and when we were wrong promptly admitted it.

11. Sought through prayer and meditation to improve our conscious contact with God as we understood Him, praying only for knowledge of His will for us and the power to carry that out.

12. Having had a spiritual awakening as the result of these steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

developmentally as a fixation or a regression to the oral phase of separation-individuation in which the superego is deficient in its ability to regulate the aggression needed to separate from the mother. This unconscious symbiotic wish for merger is accompanied by the fear of being engulfed and controlled with resulting rage. Those suffering from an addiction experience an internal inability to tolerate the fear and guilt of being a separate person; yet not separating is perceived as being just as dangerous. The addiction then serves the function of attempting to regulate the aggressive drive which is frought with conflict. It is a declaration of separateness and a cry for rescue in terms of the addicted person's object relations, along with a symbiotic fusion with an ideal object (Johnson, 1993).

Conceptualizations such as this underlie the notion of an "addictive personality." Identifying the traits and behavior manifestations of an "addictive personality" has been the focus of considerable research. However, Nathan (1988), in a review of this literature, stated that there are no personality features which reliably differentiate abusers from non-abusers.

Some who view personality pathology as preceding and predisposing to addiction tend to see great value in the ability of the 12 steps to address deficits in psychic structure. For instance, Johnson (1993) asserted that in step 1 the individual acknowledges the addictive substance explicitly, and accepts it as an outside entity over which the individual has no control. Steps 2 and 3 involve the introjection through some type of religious experience of a good, caring, internally soothing object. Steps 4 through 10 address the development of superego controls, and steps 11 and 12 revolve around building the ego-ideal.

Similarly, Rinsley (1988) saw the conversion process in the context of addiction recovery as compensating for and/or amerliorating defective psychic structure. He referred to the conversion process as supplying an otherwise absent or deficient soothing introject. In classical terms, he said conversion strengthens the ego by supplying something that was missing or defective.

Substance Abuse and Dependence Precedes Personality Pathology

The possibility that chronic substance abuse can lead to personality pathology has been advocated by O'Malley, Kosten, and Renner (1990) and most notably by Nace (1989, 1990). Nace (1990) stated that the personality disorder that emerges in the context of chronic substance dependence may not necessarily meet DSM III-R diagnostic criteria for a specific personality disorder. Rather what emerges are a constellation of traits that are by and large generic to most personality disorders. The most appropriate diagnostic category for this syndrome may be "personality disorder not otherwise specified" or "organic personality disorder."

According to Nace (1990), personality regression and a weakening of ego functions result from the pharmacological effects of substances. These substances yield immediate gratification which is highly reinforcing and in turn fosters regressive behaviors. More specifically Nace indicated that because the pharmacological effects are rapid, predictable, and pleasurable, immediate gratification is obtained with little behavioral output. This immediate gratification leads to the regressed ego state whose resultant traits are impulsivity, decreased frustration tolerance, self centeredness, grandiosity, passivity, and affect intolerance. While Nace did not rule out the possibility that some of these ego weaknesses preceded the substance

dependence, he emphasized the debilitating effect on the ego of chronic substance dependence.

In terms of treatment, Nace (1990) believed that those suffering from both substance abuse/dependence and personality pathology will experience a modification of personality pathology even when the treatment is focused on the substance abuse/dependence. He cited the highly structured nature of most rehabilitation programs (see also Wallen & Weiner, 1988) and the relational and therapeutic impact of the 12 step program of Alcoholics Anonymous (AA). AA focuses on the addict's relationship to the substance as well as the addict's relationship to God and others. According to Nace, step 1 deals with the addict's relationship to the substance and calls for an acknowledgement of powerlessness. Steps 2 and 3 deal with the addict's relationship to God, acknowledging God's existence, and his ability to heal while expressing a desire to live life under his care. Step 5 requires acknowledging to God the nature of the addict's wrongs. Steps 6 and 7 involve a willingness and a request to have God remove these defects of character. Step 11 involves improving conscious contact with God.

Relationships with others are addressed in Steps 8 and 9, acknowledging wrongs to them. Steps 8 and 9 require the making of a list of all those harmed, indicating a willingness, then actually making direct amends where possible. Step 12 involves sharing the experience with others in need. Steps 4 and 10 concern one's relationship with one's self in the form of self examination, initially taking a moral inventory, then continuing to take a moral inventory and promptly admitting it when wrong (Nace, 1990).

Continuing with the therapeutic impact of AA, Nace (1990) refers to a description by Chappel. Chappel described the first three steps as surrender

steps: initial feelings of helplessness are overcome paradoxically by admitting helplessness, and the individual begins to develop an internal locus of control. Steps 4 and 5 encourage the process of self examination similar to the process of psychotherapy. These are inventory steps. Steps 6 and 7 are referred to by Chappel as "personality disorder treatment steps," because they emphasize addressing defects of character. Steps 8 and 9 advocate healthy relationships, and Step 12 encourages serving others.

Nace (1990) made a strong case for personality pathology emerging from chronic substance dependence. Furthermore, he stated that even though character pathology may not be the focus of treatment it is addressed through the 12 steps of Alcoholics Anonymous.

O'Malley et al. (1990) made the point more generally in saying that the aim of 12 step programs are broader than abstaining from substances. They advocate a way of life that mirrors many of the same recommendations that therapists might make for those persons struggling with personality disorders: taking responsibility for the consequences of one's behavior, dealing with feelings openly and honestly, being sensitive to the needs and feelings of others, learning to delay gratification, and growth in the ability to tolerate stress and painful emotions.

<u>The Independence of Substance Abuse/Dependence and Personality Pathology</u>

Although it is possible that these two phenomena are unrelated (co-exist independently), the existing research methodology makes it impossible to test this with any degree of accuracy. In view of the current literature, the behavioral definitions and expressions and the various theoretical

formulations of these two types of disorders it is very difficult to conceive of them being independent in any meaningful sense.

Summary of Treatment Recommendations

In view of the high levels of co-occurence between substance abuse/dependence and personality pathology, for treatment to be maximally effective, it needs to address both. This is true regardless of how one conceptualizes the relationship between these two disorders. The 12 steps of Alcoholics Anonymous, an important component of nearly all treatment approaches, appear to address both the substance abuse/dependence and the personality pathology. The 12 steps address personality pathology through a relational approach. Along with a focus on the person's relationship with the substances which are abused, the 12 steps include a focus on one's relationship with God, self, and others.

Summary

Traditional understandings considered addiction and personality pathology to be one and the same. Since the separation of substance abuse and personality disorders on Axis I and II respectively, an abundance of literature has emerged documenting the co-occurrence of these phenomena. In the literature through 1985 elevated levels of co-occurence have been documented in both clinical and non-clinical samples. The results of the present review support these earlier findings.

More specifically, the prevalence literature reviewed in this work indicates that there exists a higher prevalence of diagnosed personality disorders within a substance abusing population. In non-treatment samples,

when the primary consideration is the personality disorder, the most commonly co-occurring Axis I disorder is substance abuse/dependence. When objective measures are considered, increased levels of psychopathology are found in substance abusing populations.

Overall, the studies demonstrate heterogeneity in terms of specific personality disorders. Although antisocial and borderline personality disorder appear to be most often associated with substance abuse, their relationship to substance abuse remains unclear because each personality disorder includes substance abuse as one of its diagnostic criteria.

Several methodological difficulties are inherent in this type of research and overall tend to limit generalizability somewhat. They include the use of samples drawn from treatment populations, the use of self report instruments, the retrospective analysis of data, and assessment and diagnostic procedures. Of particular concern in the latter case is the question of when diagnosis of both Axis I and Axis II is made since symptoms for both are most acute in the first days and weeks of treatment.

An abbreviated review of treatment considerations strongly suggests that in view of the consistently high correlations between substance abuse and personality disorders, both need to be considered in diagnosis and treatment. The Twelve Step Model, a major component of almost all treatment approaches, addresses both the substance abuse disorder and the personality pathology. Consequently, the 12 steps of Alcoholics Anonymous may be a necessary and extremely valuable component of the treatment process.

In conclusion, this review supports the findings of earlier studies documenting high rates of co-occurrence of substance abuse disorders and

personality pathology. These findings have important implications for diagnosis, treatment planning, and implementation. They make assessment for personality pathology in a substance abusing population and assessment for substance abuse in a personality disordered population necessary for comprehensive treatment. Further, comprehensive treatment will address both substance abuse disorders and personality pathology. Because the 12 steps of AA do address both the substance abuse and personality disorders they are a valuable component of comprehensive treatment.

REFERENCES

American Psychiatric Association. (1952). Diagnostic and statistical manual of mental disorders. Washington, DC: Author.

American Psychiatric Association. (1968). Diagnostic and statistical manual of mental disorders (2nd ed.). Washington, DC: Author.

American Psychiatric Association. (1980). Diagnostic and statistical manual of mental disorders (3rd ed.). Washington, DC: Author.

American Psychiatric Association. (1987). Diagnostic and statistical manual of mental disorders (3rd ed., revised). Washington, DC: Author.

Bellodi, L., Battaglia, M., Sciuto, G., Scherillo, P., Diaferia, G., Bernardeschi, L., & Gasperini, M. (1990). The relationship between DSM-III axis I and axis II disorders in a patient and non-patient sample. New Trends in Experimental and Clinical Psychiatry, 6(3), 137-155.

Blume, S. B. (1989). Dual diagnosis: Psychoactive substance dependence and the personality disorders. Journal of Psychoactive Drugs, 21(2), 139-144.

Brown, H. P. (1992). Substance abuse and the disorders of the self: Examining the relationship. Alcoholism Treatment Quarterly, 9(2), 1-27.

DeJong, C., van den Brink, W., Harteveld, F., & van der Wielen, E. (1993). Personality disorders in alcoholics and drug addicts. Comprehensive Psychiatry, 34 (2), 87-94.

Department of Health, Education and Welfare (1967-1969). International classification of diseases (8th ed.) (ICID-8). Washington, D.C.: Government Printing Office.

Donovan, J. M. (1986). An etiologic model of alcoholism. American Journal of Psychiatry, 143(1), 1-11.

Drake, R. E., Adler, D. A., & Vaillant, G. E. (1988). Antecedents of personality disorders in a community sample of men. Journal of Personality Disorders, 2(1), 60-68.

Endicott, J., & Spitzer, R. L. (1978). A diagnostic interview - the Schedule for Affective Disorders and Schizophrenia (SADS-LA). Archives of General Psychiatry, 37, 837-844.

Fabrega, H., Ulrich, R., Pilkonis, P., & Mezzich, J. (1993). Personality disorders diagnosed at intake at a public psychiatric facility. Hospital and Community Psychiatry, 44(2), 159-162.

Graham, J. R., & Strenger, V. E. (1988). MMPI characteristics of alcoholics: A review. Journal of Consulting and Clinical Psychology, 56(2), 197-205.

Helzer, J., & Pryzbeck, T. (1988). The co-occurrence of alcoholism with other psychiatric disorders in the general population and its impact on treatment. Journal of Studies on Alcohol, 49(3), 219-224.

Jackson, D. N. (1968). Personality Research Form. Goshen, NY: Research Psychologists Press.

Johnson, B. (1993). A developmental model of addictions, and its relationship to the twelve step program of Alcoholics Anonymous. Journal of Substance Abuse Treatment, 10, 23-34.

Kolb, J. E., & Gunderson, J. G. (1980). Diagnosing borderline patients with a semi-structured interview. Archives of General Psychiatry, 38, 531-546.

Kosten, T., Kosten, T., & Rounsaville, B. (1989). Personality disorders in opiate addicts show prognostic specificity. Journal of Substance Abuse Treatment, 6, 163-168.

Kosten, T. R., Rounsaville, B. J., & Kleber, H. D. (1982). DSM-III personality disorders in opiate addicts. Comprehensive Psychiatry, 23, 572-581.

Labouvie, E. W., & McGee, C. R. (1986). Relation of personality to alcohol and drug use in adolescence. Journal of Consulting and Clinical Psychology, 54(3), 289-293.

MacAndrew, C. (1965). The differentiation of male alcoholic outpatients from non-alcoholic psychiatric outpatients by means of the MMPI. Quarterly Journal of Studies on Alcohol, 26, 238-246.

McCann, J. T., Flynn, P. M., & Gersh, D. M. (1992). MCMI-II diagnosis of borderline personality disorder: Base rates versus prototypic items. Journal of Personality Assessment, 58(1), 105-114.

McLellan, A. T., Lubovsky, L., Woody, G. E., & O'Brian, C. P. (1980). A diagnostic evaluation instrument for substance abuse patients: The Addiction Severity Index. Journal of Nervous and Mental Diseases, 168, 26-33.

Mendelson, J., Babor, T., Mello, N., & Pratt, H. (1986). Alcoholism and prevalence of medical and psychiatric disorders. Journal of Studies on Alcohol, 47(5), 361-366.

Miller, N. S., & Fine, J. (1993). Current epidemiology of comorbidity of psychiatric and addictive disorders. Psychiatric Clinics of North America, 16(1), 1-10.

Millon, T. (1977). Millon Clinical Multiaxial Inventory. Minneapolis, MN: National Computer Systems.

Millon, T. (1987). Manual for the Millon Clinical Multiaxial Inventory-II (MCMI-II). Minneapolis, MN: National Computer Systems.

Nace, E. (1989). Personality disorder in the alcoholic patient. Psychiatric Annals, 19(5), 256-260.

Nace, E. (1990). Substance abuse and personality disorder. Journal of Chemical Dependency Treatment, 3(2), 183-198.

Nace, E., Davis, C., & Gaspari, J. (1991). Axis II comorbidity in substance abusers. American Journal of Psychiatry, 148(1), 118-120.

Nace, E., Saxon, J., & Shore, N. (1983). A comparison of borderline and nonborderline alcoholic patients. Archives of General Psychiatry, 40, 54-56.

Nathan, P. E. (1988). The addictive personality is the behavior of the addict. Journal of Consulting and Clinical Psychology, 56(2), 183-188.

National Council on Alcoholism Criteria Committee. (1972). Criteria for the diagnosis of alcoholism. American Journal of Psychiatry, 129, 127-135.

O'Malley, S. S., Kosten, T. R., & Renner, J. A. (1990). Dual diagnosis: Substance abuse and personality disorders. New Directions for Mental Health Services, 47, 115-137.

Peace, K., & Mellsop, G. (1987). Alcoholism and psychiatric disorder. Australian and New Zealand Journal of Psychiatry, 21, 94-101.

Pfohl, B., Stangl, D., & Zimmerman, M. (1983). The Structured Interview for DSM III Personality Disorders. Iowa City, IA: University of Iowa Hospitals and Clinics.

Poldrugo, F., & Forti, B. (1988). Personality disorders and alcohol treatment outcome. Drug and Alcohol Dependence, 21, 171-176.

Rinsley, D. B. (1988). The Dipsas revisited: Comments on addiction and personality. Journal of Substance Abuse Treatment, 5, 1-7.

Ross, H., Glaser, F., & Germanson, T. (1988). The prevalence of psychiatric disorders in patients with alcohol and other drug problems. Archives of General Psychiatry, 45, 1023-1031.

Southwick, S. M., & Satel, S. L. (1990). Exploring the meanings of substance abuse: An important dimension of early work with borderline patients. American Journal of Psychotherapy, 44 (1), 61-67.

Spitzer, R. L., Endicott, J., & Robbins, E. (1978). Research diagnostic criteria: Rationale and reliability. Archives of General Psychiatry, 35, 773-789.

Sutker, P. B., & Allain, A. N. (1988). Issues in personality conceptualizations of addictive behaviors. Journal of Consulting and Clinical Psychology, 56 (2), 172-182.

Wallen, M., & Weiner, H. (1988). The dually diagnosed patient in an inpatient chemical dependency treatment program. Alcoholism Treatment Quarterly, 5 (1/2), 197-218.

Zimmerman, M., & Coryell, W. (1989). DSM-III personality disorder diagnoses in a nonpatient sample. Archives of General Psychiatry, 46, 682-689.

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